

Remarks

A. Claims In the Case:

Claims 278-284, 286, 288-292, and 443-448 were rejected. Claims 278-284, 286, 288-292, and 443-448 are pending. Claim 278 has been amended.

B. The Claims Are Not Obvious Over Powers In View of Kachel et al. Pursuant To 35 U.S.C. § 103(a)

Claims 278-284, 288-292, and 443-447 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,228,289 to Powers et al. (hereinafter “Powers’289”) in view of European Patent No. 03818164 A2 to Kachel et al. (herein “Kachel”). Applicant respectfully disagrees with the rejections.

In order to reject a claim as obvious, the Examiner has the burden of establishing a *prima facie* case of obviousness. *In re Warner et al.*, 379 F.2d 1011, 154 USPQ 173, 177-178 (C.C.P.A. 1967). To establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974), MPEP § 2143.03.

Applicant submits that Powers’289 and the above-captioned application are currently owned by the same party. A copy of the Assignment is enclosed for the Examiner’s review. Applicant submits that the rejection under 35 U.S.C. § 103(a) does not apply. As such, Applicant submits that claim 278 and the claims dependent thereon (claims 288-292, and 443-447) are patentable over Powers’289 in view of Kachel.

C. The Claims Are Not Obvious Over Kachel Pursuant To 35 U.S.C. § 103(a)

Claims 278-284, 286, 288-292, and 443-447 were rejected pursuant to 35 U.S.C. § 103(a)

as being unpatentable over Kachel. Applicant respectfully disagrees with the rejections.

Amended claims 278 relates to a computer program executable on a computer readable media that includes a combination of features including, but not limited to, the features of:

determining curing conditions for a lens based on the eyeglass prescription, wherein the curing conditions comprise a dosage of activating light, and wherein the prescription information is analyzed to determine the dosage of activating light required to at least partially cure the lens forming composition to form the eyeglass lens.

Applicant's specification, states in part:

Referring now to Fig. 1, a plastic lens curing apparatus is generally indicated by reference numeral 10. As shown in Fig. 1, lens forming apparatus 10 includes at least one coating unit 20, a lens curing unit 30, a post-cure unit 40, and a controller 50. Preferably, apparatus 10 includes two coating units 20. Coating unit 20 is preferably configured to apply a coating layer to a mold member or a lens. Preferably, coating unit 20 is a spin coating unit. Lens curing unit 30 includes an activating light source for producing activating light. As used herein "activating light" means light that may affect a chemical change.
(Specification, page 20 lines 7-14).

The formation of lenses involves: 1) Preparing the mold assembly; 2) Filling the mold assembly with the lens forming composition; 3) Curing the lens; 4) Post-curing the lens; and 5) Annealing the lens. Optionally, the lens may be coated before use. The formation of lenses may be accomplished using the plastic lens curing apparatus described above.
(Specification, page 214, lines 12-16).

The controller may also be configured to control the various operations of the lens curing unit. Some of the operations that may be controlled or measured by the controller include: (i) measuring the ambient room temperature; (ii) determining the dose of light (or initial dose of light in pulsed curing applications) required to cure the lens forming composition, based on the ambient room temperature; (iii) applying the activating light with an intensity and duration sufficient to equal the determined dose; (iv) measuring the composition's temperature response during and subsequent to the application of the dose of light; (v) calculating the dose required for the next application of activating light (in pulsed curing applications); (vi) applying the activating light with an intensity and duration sufficient to equal the determined second dose; (vii) determining when the curing process is complete by monitoring the temperature response of the lens forming composition during the application of activating light; (viii) turning the upper and lower light sources on and off independently; (ix) monitoring the lamp temperature, and controlling the temperature of the lamps by activating cooling fans proximate the

lamps; and (x) turning the fans on/off or controlling the flow rate of an air stream produced by a fan to control the composition temperature....
(Specification, page 7, lines 4-19).

After the mold assembly has been filled with the monomer and inspected, the mold assembly is transferred to a lens curing unit. A lens curing unit such as lens curing unit 30 (see FIG. 1) described above may be used. The curing conditions for the lens forming composition may depend on the type of lens being formed and the type of lens forming composition being used...Table 11 summarizes the lens curing conditions required to cure most types of lenses....

LENS INFORMATION			CURING INFORMATION			
Sphere	Lens Type	Tinted	Filter	Initial Dose	Postcure Time	Anneal Time
+4.00 to +2.25	Clear	No	50 mm	90 Sec. Back and Front	13 Min.	7 Min.
+4.00 to +2.25	Clear	Yes	50 mm	90 Sec. Back and Front	15 Min.	7 Min.
+4.00 to +2.25	Photo		50 mm	90 Sec. Back and Front	13 Min.	7 Min.
+2.00 to -4.00	Clear	No	Clear Plate	7 Sec. Front	13 Min.	7 Min.
+2.00 to -4.00	Clear	Yes	Clear Plate	7 Sec. Front	15 Min.	7 Min.
+2.00 to plano	Photo		Clear Plate	15 Sec. Front	13 Min.	7 Min.
-0.25 to -4.00	Photo		Clear Plate	20 Sec. Back, w/ 7 Sec. Front starting @ 13 Sec. elapsed time.	13 Min.	7 Min.

Table 11

...As shown in Table 11, seven different processes may be used to cure a wide variety of lenses. This greatly simplifies the programming and operation of the lens curing unit.

(Specification, page 230 line 27 through page 233 line 15).

Applicant submits that Kachel does not appear to teach or suggest determining dosage of activating light used to at least partially cure a lens forming composition to form the eyeglass lens. Kachel appears to teach an automated apparatus to coat an eyeglass mold. The material coated onto the mold appears to be cured with UV light to form a coating on the eyeglass mold. The eyeglass mold is then filled with resin and heated to produce the coated eyeglass lens. Kachel, therefore, appears to teach heating the molds to cure the lens forming composition to form the eyeglass lens. Additionally, the heating cycle of Kachel appears to be based on the resin type, rather than the eyeglass prescription.

Kachel states:

After all the gasket assemblies have been filled with resin, the operator places them in the oven or ovens 26 as the case may be. The ovens 26 subject the resin to a heat cycle which will cause solidification.
(Kachel, page 16, lines 52-53).

Procedure

- 1.1 Clean front molds are spin coated with the above front coating mix...
- 1.3 The coated front mold is rotated at approximately 38 RPM while exposing to ultraviolet U.V. light...
- 1.4 The back mold is coated....
- 1.5 The mold halves are assembled....
- 1.6 The mold assembly is then filled through fill ports in the gasket with the coating resin, a mixture of allyl diglycol carbonate, 3% isoperoxy percarbonate (IPP) with shrink reduction additives.
- 1.7 The filled assembly is cured in a horizontal flow forced air oven for 15 hours. Temperature starts at 105 °F and ramps to 145 °F.
- 1.9 The resultant lens are wiped clean with acetone and soft tissue, then placed back in oven for post cure

(Kachel, page 26, lines 35-54).

Applicant submits that Kachel does not appear to teach or suggest using activating light to cure the lens forming composition to produce an eyeglass lens. Applicant submits a coating for an eyeglass lens is not the same as an eyeglass composition used for producing an eyeglass lens. Applicant respectfully submits that the features of the claim including, but not limited to, the features of: "determining curing conditions for a lens based on the eyeglass prescription, wherein the curing conditions comprise a dosage of activating light, and wherein the prescription

information is analyzed to determine the dosage of activating light required to at least partially cure the lens forming composition to form the eyeglass lens” are not taught or suggested by Kachel. As such, Applicant submits that independent claim 278 and the claims dependent thereon (claims 278-284, 288-292, and 443-447) are patentable over Kachel.

Claim 286, states in part, “wherein the front mold member comprises a front mold identification marking, the back mold member comprises a back mold identification marking, the gasket member comprises a gasket identification marking, and wherein the operations further comprise producing a visual display of the front mold identification marking, the back mold identification marking, and the gasket identification marking subsequent to analyzing the prescription data.” Applicant submits, for at least the reasons stated above, the features of claim 286 in combination with the features of independent claim 278 are not taught or suggested by Kachel.

Claim 289 states in part, “wherein the operations further comprise controlling a lens curing unit, the lens curing unit being configured to cure the lens forming composition, wherein controlling the lens curing unit comprises operating the lens curing unit such that the curing conditions are produced.” Applicant submits that Kachel does not appear to teach or suggest a computer program that determines the curing conditions and determines operations to control a lens curing unit. Kachel appears to teach the use of a heating cycle rather than a light curing cycle. The heating cycle of Kachel appears to be based on the resin type, rather than the eyeglass prescription. Kachel states:

After all the gasket assemblies have been filled with resin, the operator places them in the oven or ovens 26 as the case may be. The ovens 26 subject the resin to a heat cycle which will cause solidification. The typical time cycle will be overnight, however, shorter time cycles may be utilized depending on the resin formulation.

(Kachel, page 16, lines 52-55).

The operator can then removed (sic) the filled forms from accumulator 338, and place them within either of two ovens, which are controlled for suitable curing cycles. A typical curing cycle would be for an initial 15 hours commencing at 105 °F and ramped to increase to 145 °F.

(Kachel page 17, lines 55-57).

Applicant submits, for at least the reasons stated above, the features of claim 289 in combination with the features of independent claim 278 are not taught or suggested by Kachel.

Claim 443 states in part, “collecting prescription information which defines the eyeglass prescription.” Applicant submits, for at least the reasons stated above, the features of claim 443 in combination with the features of independent claim 278 are not taught or suggested by Kachel.

Claim 444 state in part, “the dosage of activating light comprise an intensity of activating light required to at least partially cure the lens forming composition.” Applicant submits, for at least the reasons stated above, the features of claim 444 in combination with the features of independent claim 278 are not taught or suggested by Kachel.

Claim 445 states in part, “the curing conditions comprise an amount of time required for postcure.” Applicant submits, for at least the reasons stated above, the features of claim 445 in combination with the features of independent claim 278 are not taught or suggested by Kachel.

Claim 446 states in part, “postcure time comprises an amount of time required for treating the at least partially cured lens composition with heat and additional activating light in a postcure unit.” Applicant submits, for at least the reasons stated above, the features of claim 446 in combination with the features of independent claim 278 are not taught or suggested by Kachel.

Claim 447 states in part, “the curing conditions comprise an amount of time required for annealing the formed eyeglass lens.” Applicant submits, for at least the reasons stated above, the features of claim 447 in combination with the features of independent claim 278 are not taught or suggested by Kachel.

D. The Claims Are Not Obvious Over Kachel in view of Powers Pursuant To 35 U.S.C. § 103(a)

Claim 448 was rejected as being unpatentable over Kachel in view of Powers. Applicant respectfully disagrees with the rejection.

Amended claim 448 states in part, “wherein the dosage of activating light comprises an intensity of activating light required to at least partially cure the lens forming composition, and wherein determining the intensity comprises analyzing the prescription information and determining a type of filter to be used in the lens curing unit.” Applicant submits, for at least the reasons stated above, the features of claim 448 in combination with the features of independent claim 278 are not taught or suggested by Kachel alone or in combination with Powers.

Additionally, Applicant submits that Kachel is not properly combinable with Powers. Kachel appears to be directed to a method of forming eyeglass lenses using a heat curing process. Such a process relies on heat to initiate a polymerization reaction. In contrast, Powers is directed to a method of forming an eyeglass lens using activating light to initiate a polymerization reaction. Additionally, as noted in Applicant’s specification the pattern of light that hits the lens forming composition in a mold member may have an influence on the success of curing of the lens forming composition. Applicant submits that it would not be obvious that the mold members of Kachel, which are used for thermal curing of lens forming compositions, could be substituted for the mold members of Powers. As such, Applicant respectfully requests removal of this rejection.

E. **Additional Remarks**

Applicant respectfully requests favorable reconsideration.

If any extension of time is required, Applicant hereby requests the appropriate extension of time. If any fees are required, please appropriately charge those fees to Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C. Account Number 50-1505/5040-04207/EBM

Respectfully submitted,

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